Blog 5: Why 'lust to dust' should replace 'cradle to grave' as the vision of an asset's life cycle

(Getting Ready for ISO 55000 – Part 5 of 10)

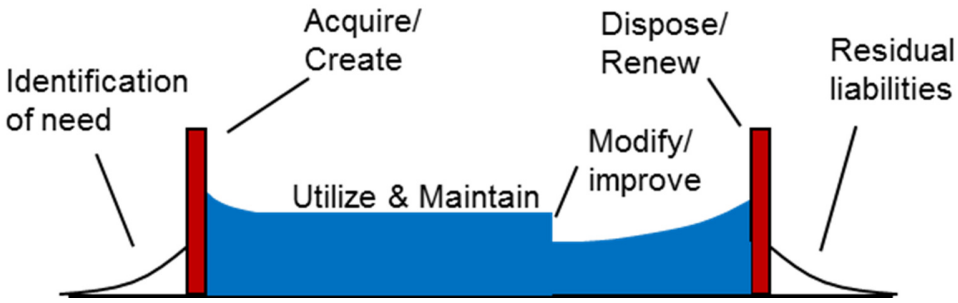
Insights from the "Asset Management for the 21st Century - Getting Ready for ISO 55000" Seminar, May 2013, Calgary: *This blog is based on a series of interviews with John Woodhouse from The Woodhouse Partnership (TWPL), who delivered this well-received seminar. John Woodhouse is CEO and Managing Director of asset management consulting firm TWPL, is a founder member of the Institute of Asset Management. He chaired the development of the PAS 55 standard and is UK Principal Expert in the development team for the ISO 55000 standard.*

A popular metaphor in asset management is managing assets from "cradle to grave." At first blush, this sounds compelling. But it is actually an incomplete vision. It is better to begin the management process when the assets are being designed or selected—indeed from the first identification of need or opportunity.

Functional requirements, design, and appropriate asset selection are where some of the biggest prizes are to be had in getting better life cycle value for money. By the time the asset is in the cradle, it's too late—the 'DNA' is already determined, along with 80% of the cost and performance characteristics of the asset over its whole life.

A better metaphor for asset management is from "lust to dust." In this way, we include the important "desire and conception" stage. Then, we have a better chance of getting the right assets in the first place. And the metaphor goes right through to decommissioning, recycling, or disposal. This backend of the life cycle is fuzzier than you might think. "Grave" implies that an asset simply dies and has to be put in the ground as a unit. But there are usually possibilities of life extension, recycling, re-sale or alternative usage. You could have a situation where the only thing that remains is the nameplate. An asset could have infinite life through the constant replacement of all of the individual components (look at the number of old VW bugs still on the roads today!).

Another dusty aspect of the backend of the life cycle is associated with residual liabilities. Even when you've decommissioned an asset, you need to be aware of any risks or liabilities that exist beyond that point because they're part of the cost of ownership. The nuclear sector is an obvious example, or the environmental cleanup responsibilities of chemical process plants. In the construction world, architects have a 20-year personal consequences liability, even after they've finished their design job.



Even when we extend our management of asset life cycles to cover lust to dust, there are complexities and blurred realities to consider:

1. **Defining life stages.** The life stages may not be clear-cut; the asset may go through cycles of creation, usage, disposal, new acquisition, re-usage, modification, partial decommissioning and recycling again, passing through different functions, configurations and ownerships.
2. **Possibility of infinite asset life.** An asset could have an infinite life if it is defined at a functional *system* level (rather than as an independent and disposable unit). It may be possible, for example, to sustain a system-level asset indefinitely through maintenance and renewal of the component elements.

And what if the responsibility for managing the asset is split across organizational boundaries, either in different life cycle stages (construction by one company, sold for usage by another, and maintained by a third)? What if it forms part of a bigger system that has part-ownership and management responsibility by different organizations (train operators and track infrastructure companies)? How should the responsibility, costs, and risks for the asset life cycles then be apportioned?

In practice, I believe the most useful interpretation is to be selfish—defining life cycles *only* from the viewpoint of organization's ownership or contractual responsibility (and therefore asset *management* obligations and value realization opportunities). This is also the position taken in the ISO 55000 standard for asset management which defines the life cycle as "the stages involved in the management of an asset", where an asset is "an item that has potential or actual value to an organization". After all, asset life cycle management is complex enough already.